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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/862,906	05/22/2001	Veijo Vanttinen	324-010361-US(PAR)	8729
2512	7590	11/26/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			KHUONG, LEE T	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/862,906

Applicant(s)

VANTTINEN, VEIJO

Examiner

Lee Khuong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-11, 13-18 is/are rejected.
- 7) ☒ Claim(s) 3 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/22/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/10/2001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figure 1A should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The abstract of the disclosure is objected to because

Page 19, line 15, the abstract contains minor informality "(Figure 3)". Applicant is suggested to delete the word "(Figure 3)" since it is not required to include a figure in an abstract.

Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities:

Page 1, par. 0004, lines 25 and 30, it seems a typo error has occurred that "metros" is used instead of "meters". Applicant is suggested to changed the words "metros" to "meters".

Appropriate correction is required.

Claim Objections

4. Claim 1 is objected to because of the following informalities:

Regarding claim 1, for consistency in the claim language, it is suggested that the following words:

(1) “or a first party” are added after “user equipment” in page 6, line 3.

(2) “or a second party” are added after “a serving mobile location center” in page 16, lines 8-9.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 4-9, 10-11, 13-18 are rejected under 35 U.S.C. 102(e) as being anticipated by King et al (US 6,313,787), hereinafter referred as King.

Regarding claims 1 and 10, King discloses a Method For Assisted GPS Protocol:

wherein the data is transmitted using a data transmission link (the Um 144, Fig. 2) between user equipment (the MS 104, Fig. 2) of the radio system (see col. 8, lines 65-67, col. 9,

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lines 1-4, BSC forwards a RRLP assistance data message to the MS. The MS sends an RRLP ACK message back to the BSC),

a serving mobile location center (a SMLC 112, Fig. 1, col.6, lines 34-38, the SMLC manages the overall coordination and scheduling of resources required to perform positioning of a mobile),

the data to be transmitted is placed in a message (a message 432, Fig. 5) of a third-layer radio resource protocol (a layer 3-RRLP, Fig. 4) set on top of a packet protocol stack residing in a first party (the MS 104, Fig. 4) of the data transmission link (the Um 144, Fig. 4, col. 8, lines 65-67, col. 9, lines 1-4, the MS responds with a RRLP ACK message from the MS' layer 3 that was encapsulated in its logical link layer 2 and transmits its message to the BSC),

the radio resource protocol message (the RRLP, Fig. 4) is transmitted to the radio network (the BSC 110, Fig. 4) using a logical link control protocol (the logical link protocol is inherent in L2, Fig. 4) set on the second layer (the L2 of the protocol stack, Fig. 4) of the protocol stack,

a logical link control protocol relay (the RELAY protocol of BSC 110, Fig. 4) set on the second layer (the layer 2 SCCP, Fig. 4) of the packet protocol stack in the radio network (the BSC 110, Fig. 4) directs the logical link protocol message (a message in layer 2 of MS 104) to a second party (the SMLC, 112, Fig. 4, col. 9, lines 4-6, BSC forwards a RRLP ACK message to the SMLC),

the second-layer logical link control protocol (the layer 2 SCCP, Fig. 4) residing in the second party (the SMLC 112, Fig. 4) and set on the packet protocol stack transmits the radio

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resource protocol message to the radio resource protocol (the RRLP at the third layer of SMLC) *set on the third layer,*

the second party (the SMLC 112, Fig. 4) *disassembles the transmitted data from the radio resource protocol message* (inherently disassembles the transmitted the message from MS 104 to the RRLP layer of the SMLC 112).

Regarding claims 2 and 11, King discloses *the radio resource- protocol is a radio resource location service protocol* (RRLP, Fig. 4, col. 8, lines 65-67, col. 9, lines 1-4, BSC forwards the RRLP assistance data message to the MS).

Regarding claims 4 and 13, the frame of a logical link control protocol inherently has its own cell identifier (*service access point identifier*) since each MS belongs to a cell which is under control of each base station that is identifiable within the wireless communication system by a unique identifier.

Regarding claims 5 and 14, each logical link control protocol frame inherently contains a header (*separate address space*) in which separate fields are designated for a source and a destination address.

Regarding claims 6 and 15, in order for the BSC to know which destination address it needs to forward/relay a MS message to, the BSC must determine (*examines*) from the message/frame header for the destination address, which has been explained in the rejection of

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claims 4 and 13. Using the determined destination address, the BSC forwards the frame to its destination, which is the SMLC in this case.

Regarding claims 7 and 16, a RRLP message is inherently encapsulated from a layer 3 to a layer 2 prior to its transmission state, therefore, the message must be encrypted for a transmission to take place according to the 7-layer of an OSI model.

Regarding claims 8 and 17, King discloses *the logical link control protocol in the serving mobile location center (the SMLC 112, Fig. 4) supports more than one simultaneous radio resource protocol entities (the SCCP and the BSSLAP-LE 112, Fig. 4, col. 8, lines 28-37, the logical link control protocol in the SMLC supports multiple protocol including SCCP and BSSLAP-LE protocols)*

Regarding claims 9 and 18, King discloses *request to define the location of a mobile station (in the step 428, Fig. 5, col. 9, lines 10-11, the SMLC sends a RRLP measure position request to the BSC),*

message to provide the location of a mobile station (in the step 432, Fig. 5, col. 9, lines 21-23, the GPS location estimate/measurements are returned to the BSC in a RRLP MEASURE POSITION response),

message containing data assisting in location (in the step 430, Fig. 5, col. 8, lines 65-67, the BSC forwards the assistance data to the MS in a RRLP ASSISTANCE DATA message),

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acknowledgement of data assisting in location (in the step 432, Fig. 5, col. 9, lines 2-4, the MS acknowledges the reception of complete assistance data to the BSC with a RRLP ASSISTANCE DATA Acknowledgement message), and

protocol error message (see col. 9, lines 24-25, if the MS was unable to perform the necessary measurements, or compute a location, a failure notification message is returned).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Havinis et al (US 6,311,069); Havinis (US 6,104,932); Havinis et al (US 6,295,454); Saha et al (US 6,198,935); Havinis et al (US 6,516,197); Naghian (US 2002/0086682); Saha et al (US 6,606,501) are cited to show system and method of Data Transmission In Packet-Switched Radio System Implementing User Equipment Location Service, which is considered pertinent to the claimed invention.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Khuong whose telephone number is 571-272-3157. The examiner can normally be reached on 9AM - 5PM.

9. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lee T. Khuong
Examiner
Art Unit 2665

**DUCHO
PRIMARY EXAMINER**



11-18-04